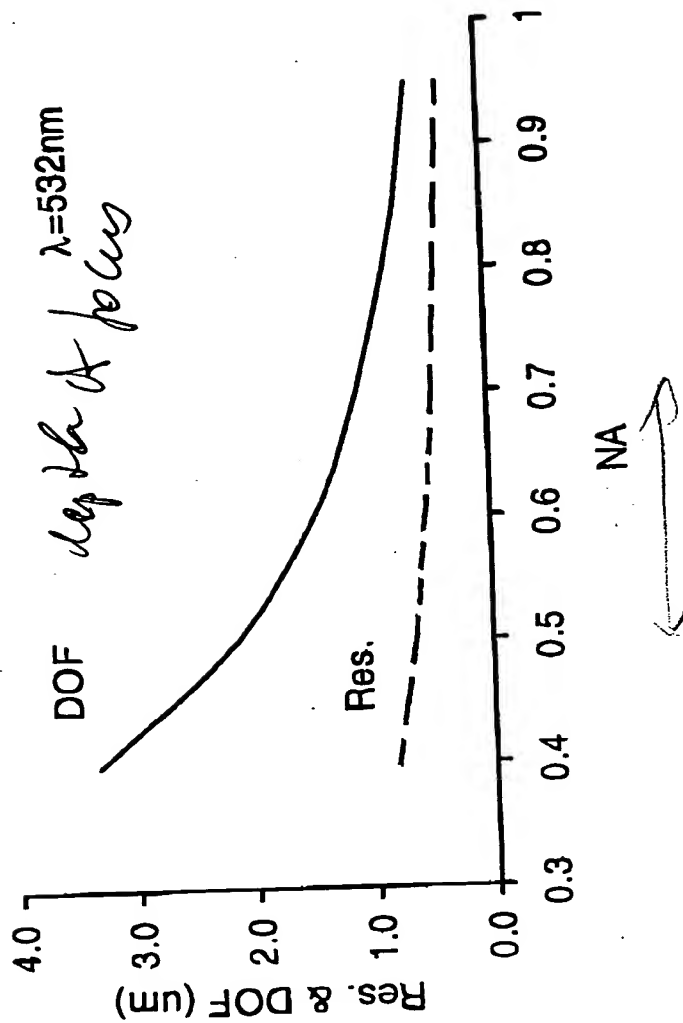


Figure 1. White light dark field system

FIG. 1

[illegible]

F16.2

24  
 Y  
 X

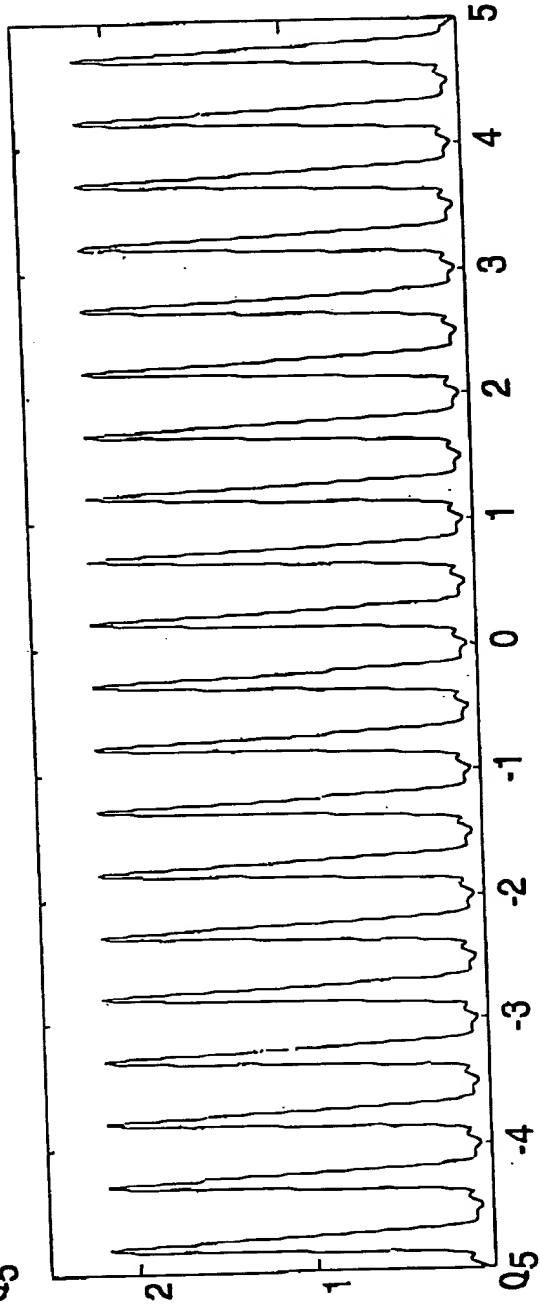
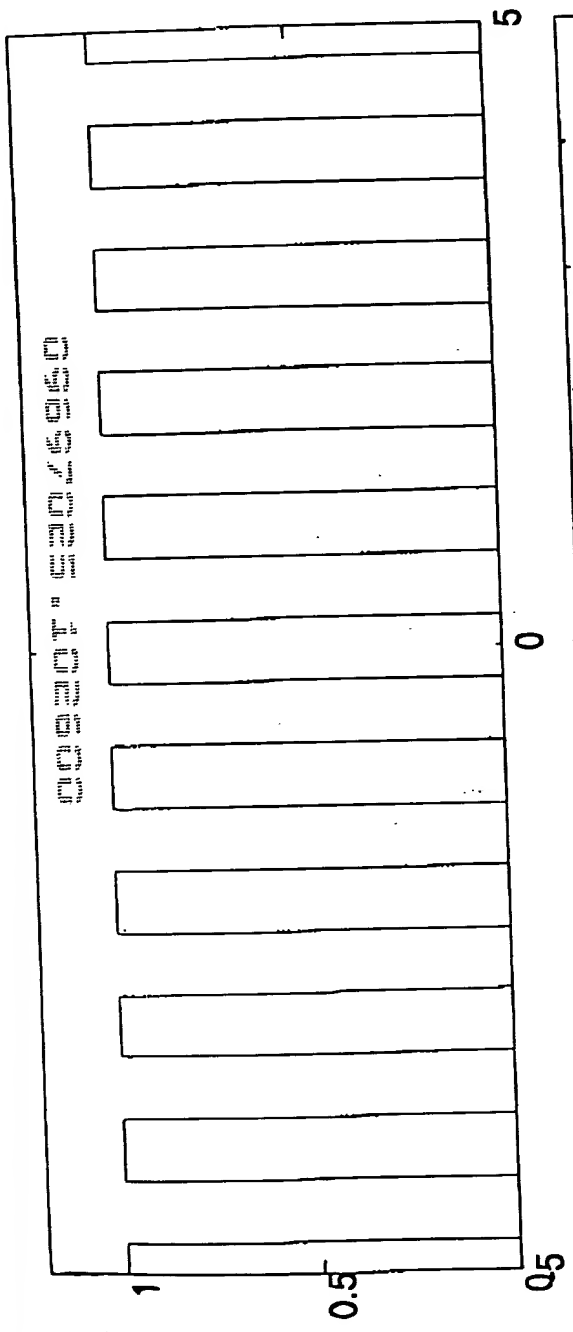
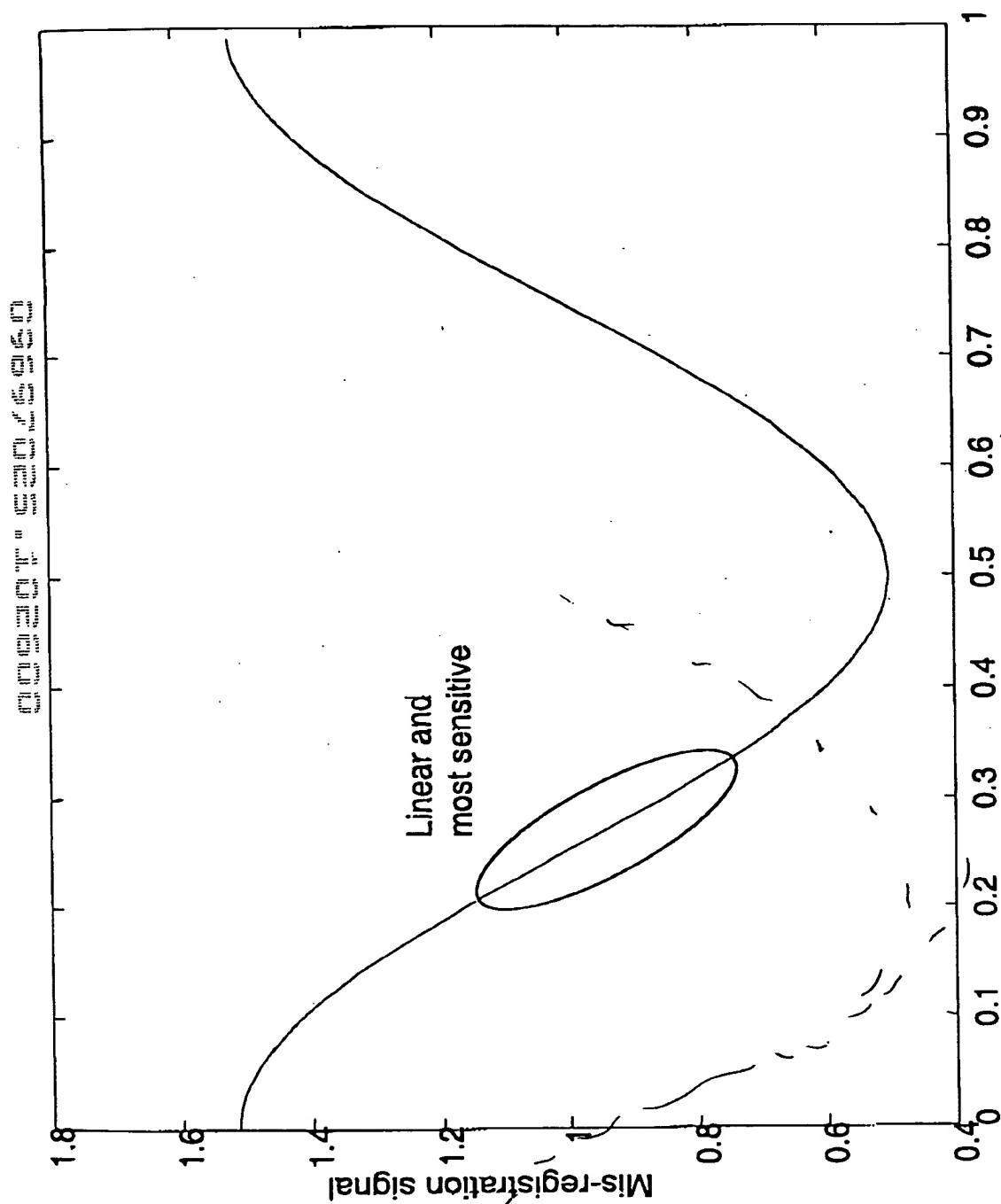


FIG. 3B

Top: Overlay grating target; Bottom: White light dark field image of target

FIG. 3A



Target shift:  $\delta x(\mu m)$

4. 15. 11

# Darkfield illumination for overlay error measurement

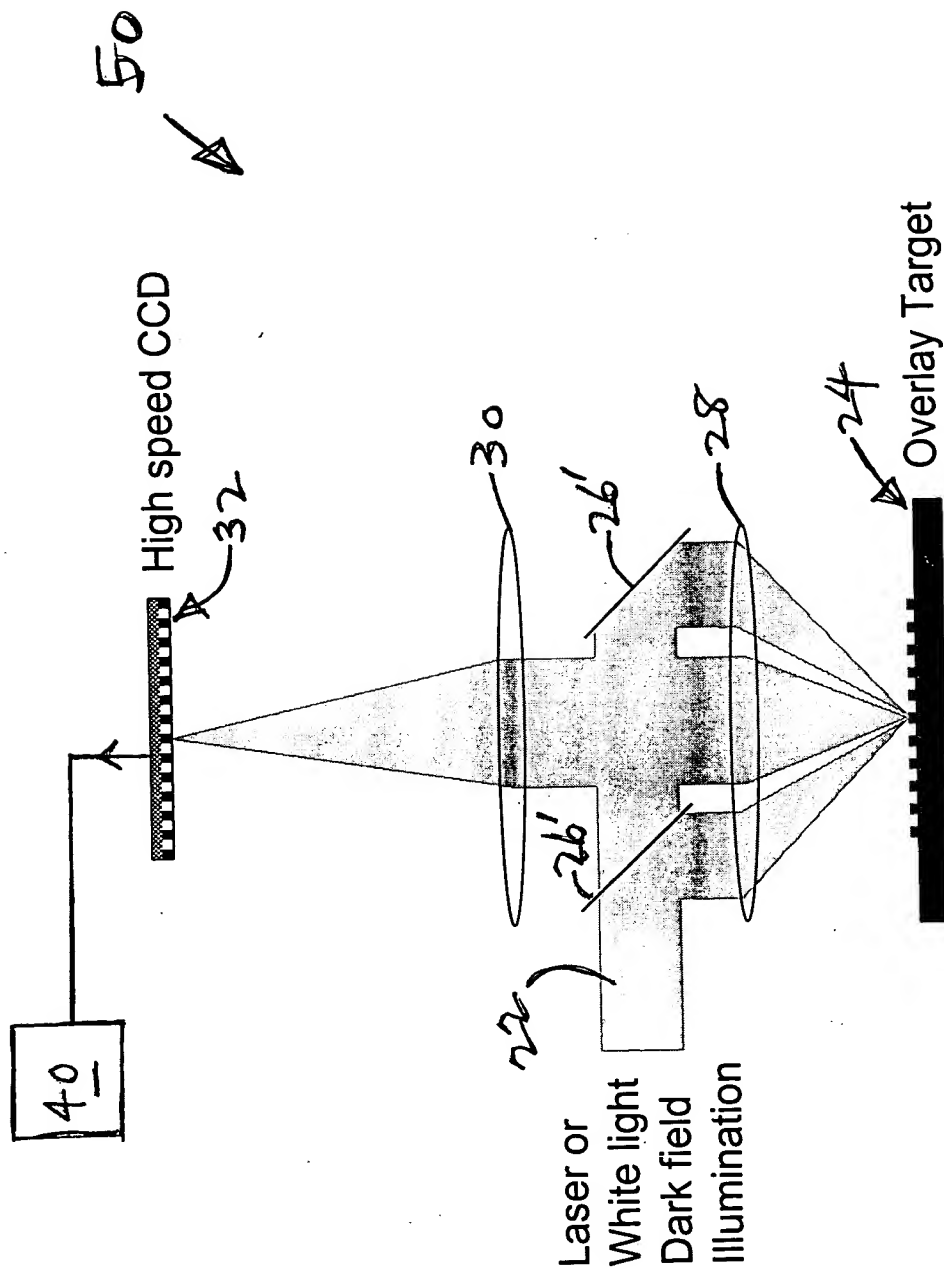


Fig. 5

70

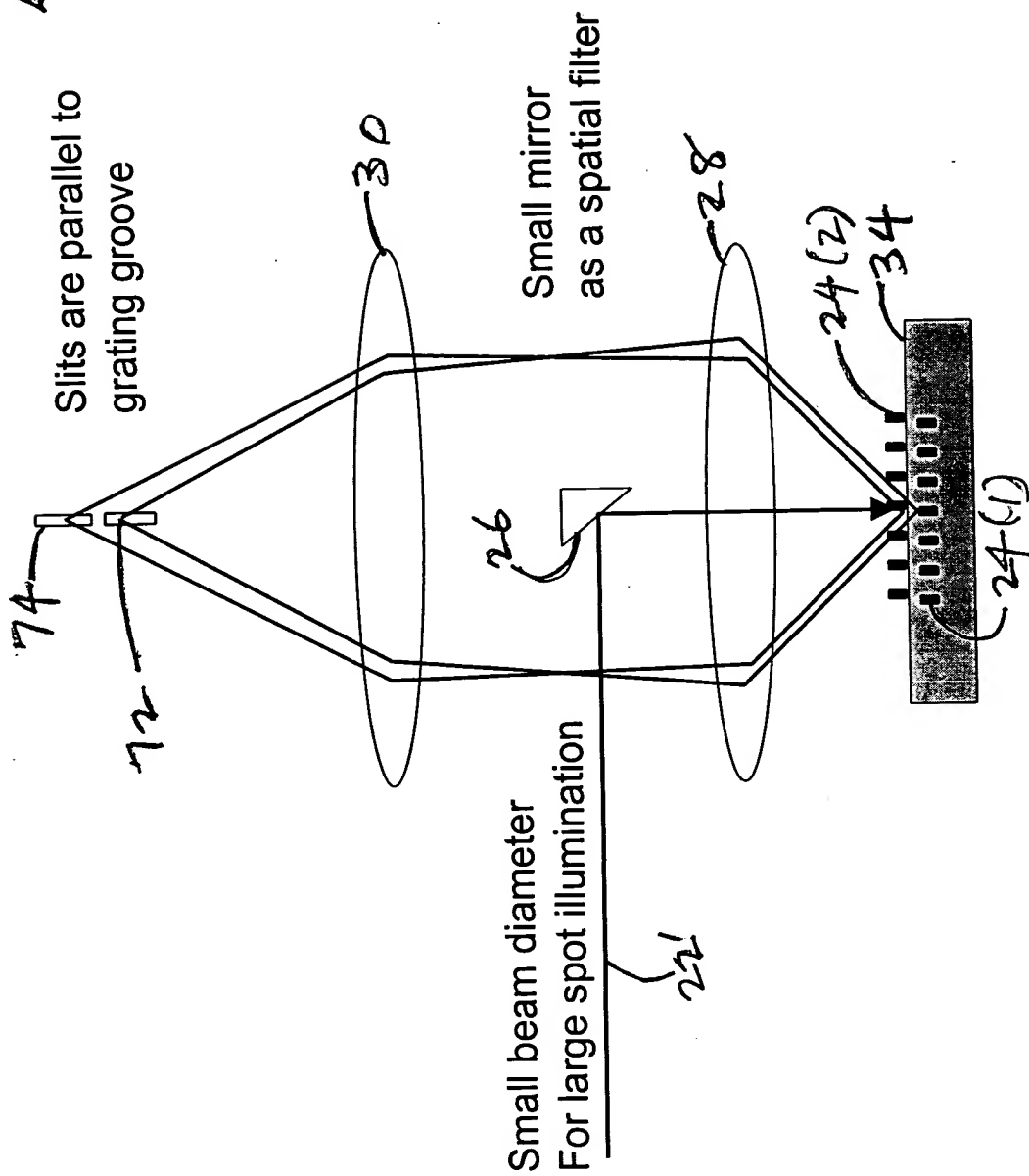


Fig. 6A Laser dark field with dual slit scanning, front view.

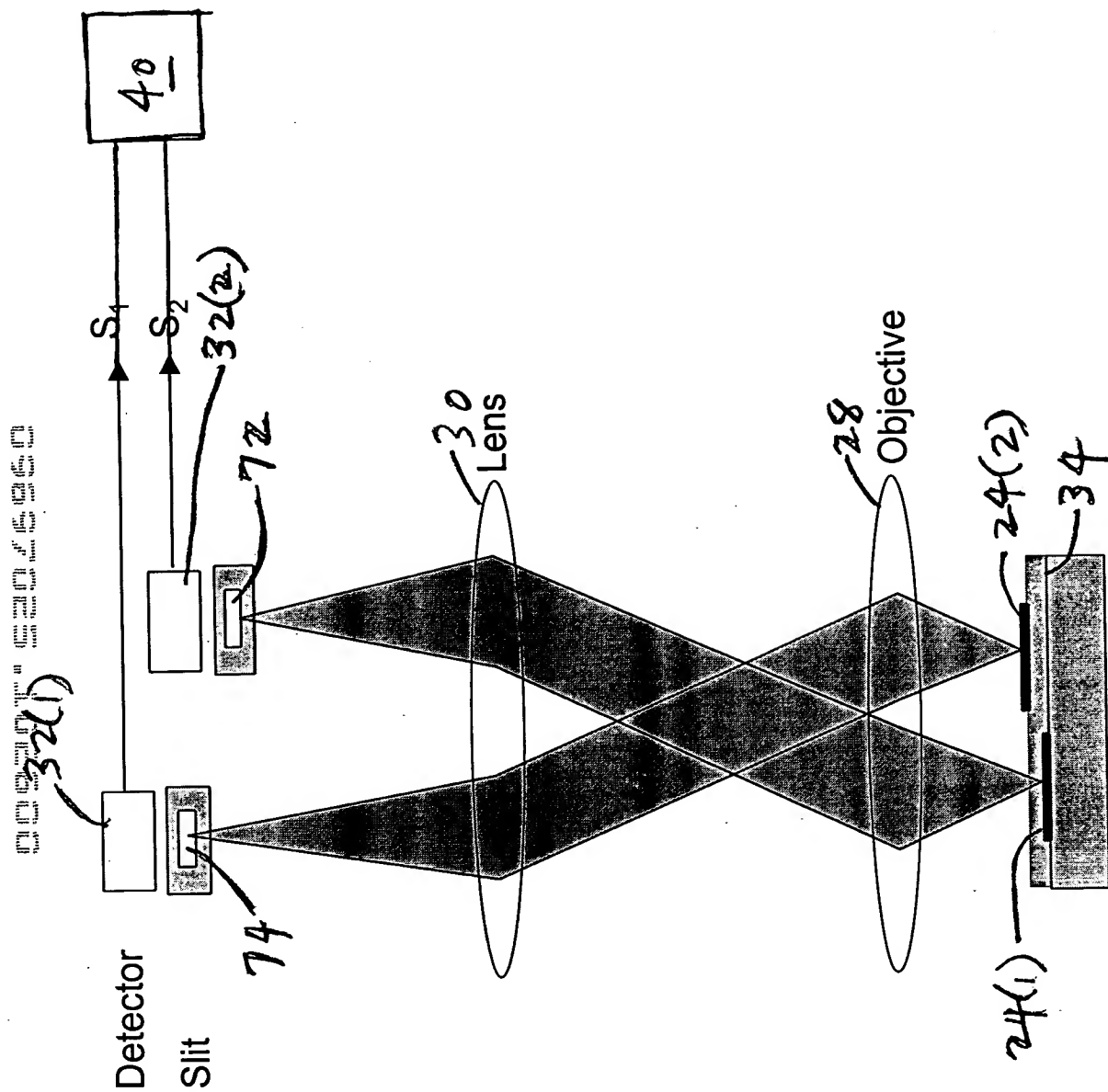


FIG. 6B Laser dark field with dual slit scanning, side view

# illumination optics for low-NA imaging

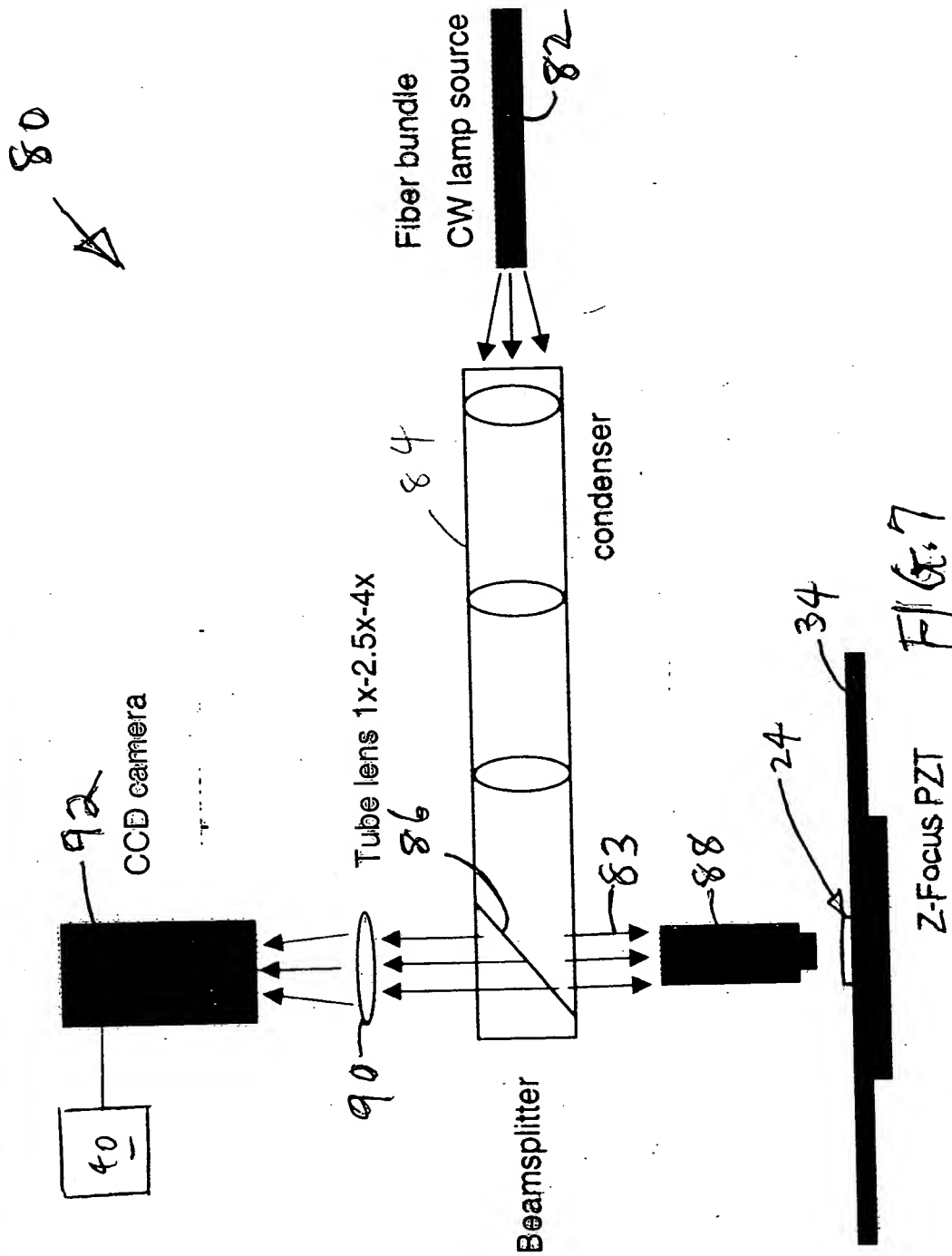




FIG. 9 Example of a two-dimensional grating image  
 $I(x,y)$

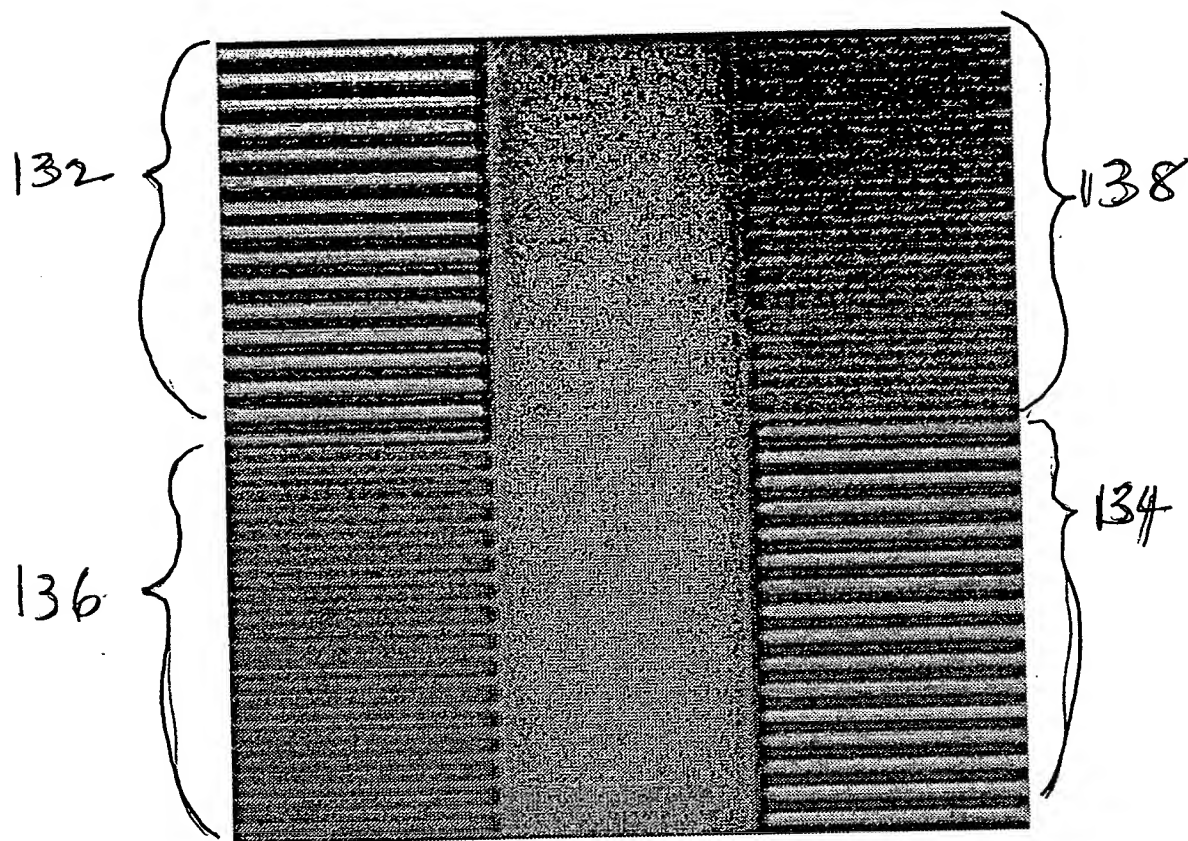
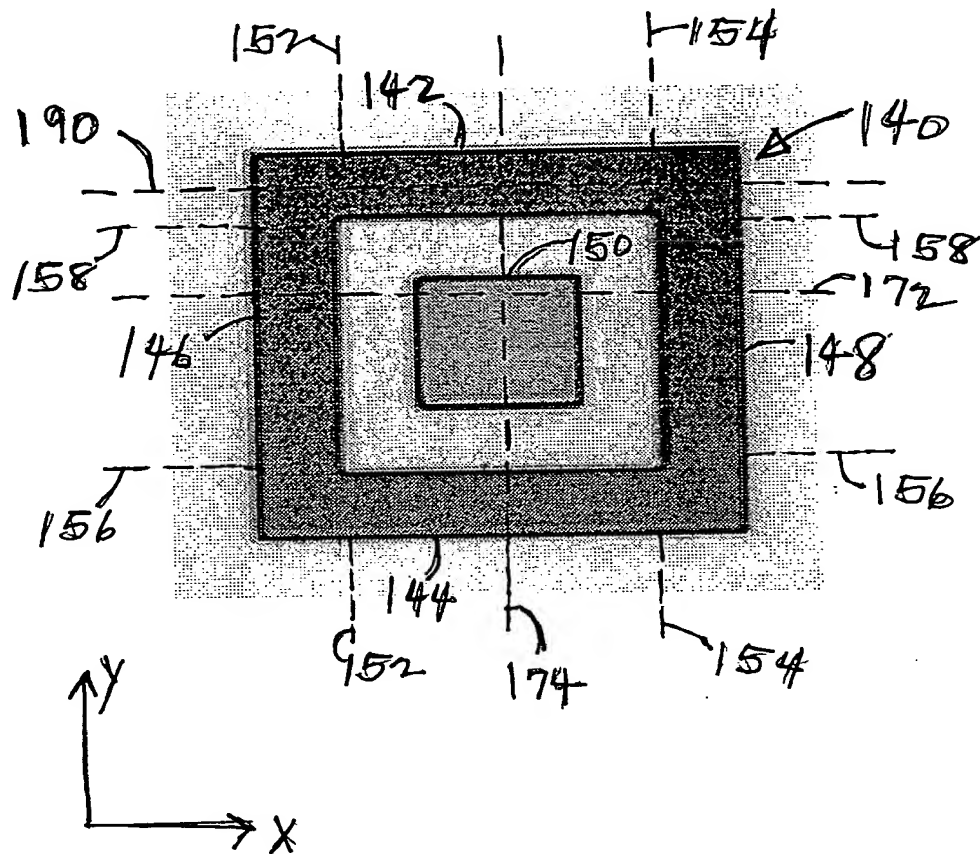


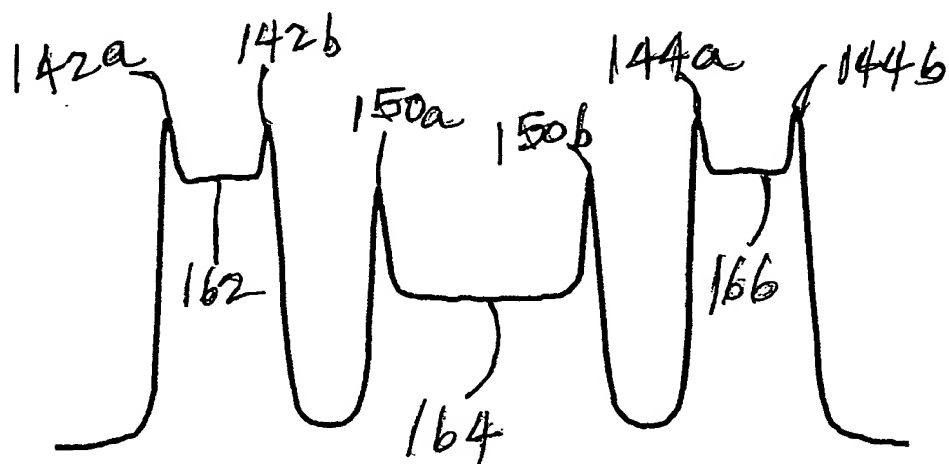
Fig. 10



FIG. 11 Example of a two-dimensional box-in-box image  $I(x,y)$



1. The first step is to identify the problem. This involves understanding the symptoms and the context in which they are occurring.



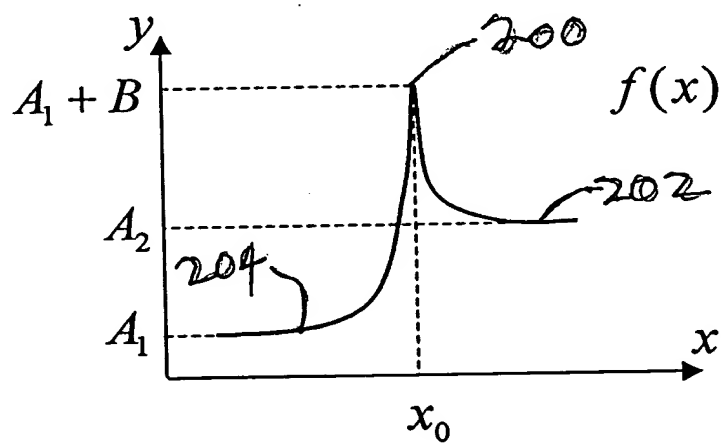


FIG. 13

[illegible]



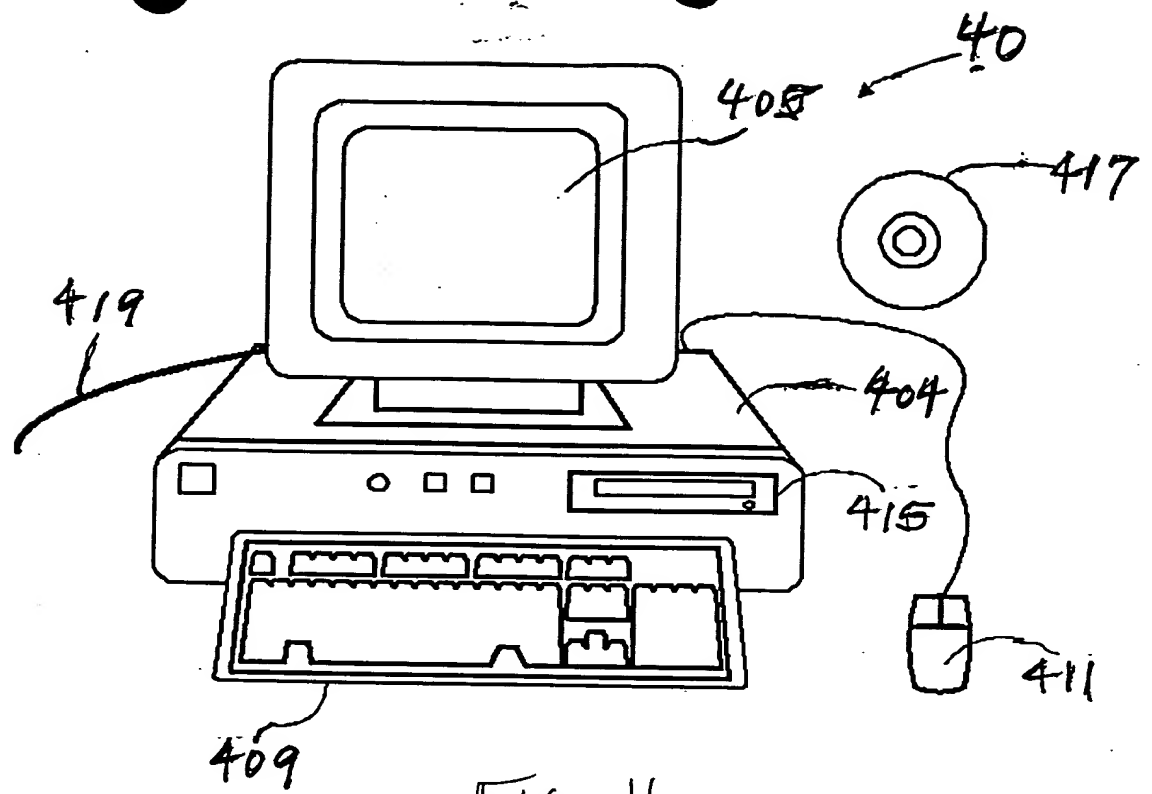


FIG. 16